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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/644,978

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Robert A. Dunstan

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08/21/2006

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EXAMINER

BUTLER, DENNIS

ART UNIT

PAPER NUMBER

2115

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,978

Applicant(s)

DUNSTAN ET AL.

Examiner

Dennis M. Butler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-18,20-32 and 34-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-18,20-32 and 34-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/29/06</u> . | 6) <input type="checkbox"/> Other: _____ |

1. This action is in response to the amendment received on June 1, 2006. Claims 1, 3-18, 20-32 and 34-47 are pending.
2. The objection to the title of the invention is withdrawn in view of applicant's amended title.
3. The text of those sections of Title 35, US Code not included in this action can be found in a prior Office Action.
4. Claims 9-16, 26-31 and 40-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9-16 are indefinite as to what claim they depend from because they are dependent on canceled claim 2.

Claims 26-31 are indefinite as to what claim they depend from because they are dependent on canceled claim 19.

Claims 40-47 are indefinite as to what claim they depend from because they are dependent on canceled claim 33.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Applicant's original specification does not provide antecedent basis for the term "tangible". Therefore, the specification fails to provide the meaning of the term "tangible" as used in claims 32-47. See MPEP 608.01(o).
6. Claims 32-47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to a machine accessible medium containing instructions that cause functions to be performed at some future time when the instructions are executed. Applicant has defined the medium as a signal in paragraph 33 of the published application. Therefore, the claims are directed to an electro-magnetic signal, a carrier wave, electrical, optical and acoustical signals that are a form of energy. The claims recite a signal encoded with functional descriptive material. The signal is nonstatutory because it is a form of energy and it does not fall within any of the categories of patentable subject matter set forth in 35 U.S.C. 101 as disclosed in the statute.

In the remarks, applicant argues that the phrase "tangible" makes clear that the medium is a tangible medium. However, applicant's original specification does not provide antecedent basis for the term "tangible". Therefore, the specification fails to provide the meaning of the term "tangible" as used in claims 32-47. See MPEP 608.01(o). Since applicant may give a term used in the claims a special meaning, the examiner and the public cannot determine how the term "tangible" limits the claims. The examiner has maintained the rejection because the term "tangible" is not considered to exclude electro-magnetic signals, a carrier waves, electrical, optical and acoustical signals as described in paragraph 33 of the published application. However, the claim language would be improved if the medium were claimed as a machine accessible storage medium in order to indicate that the claimed medium includes the storage media/devices described in paragraph 33 and excludes the electro-magnetic signals, a carrier waves,

electrical, optical and acoustical signals as described in paragraph 33 of the published application.

7. Claims 1, 3-18, 20-32 and 34-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft, OnNow Power Management Architecture for Applications.

Per claims 1 and 32:

A) Microsoft teaches the following claimed items:

1. configuring a data processing device to recognize a visual on state (on/working) and a visual off state (sleep) with the operating system determining and controlling the power states in the Overview of the OnNow Architecture section and with figure 1;
2. identifying a request to turn off the data processing device with the user pushing the front panel button in the Overview of OnNow Power States and Power Policy section and with figure 2.
3. transitioning the data processing device to the visual off state instead of turning off the data processing device with transitioning to the sleep state instead of transitioning to the soft off state in figure 2, with the Overview of OnNow Power States and Power Policy section and with the WM_POWERBROADCAST section on page 4.

B) The claims differ from Microsoft in that Microsoft fails to explicitly teach turning audible and visual indicators off in the visual off state as claimed.

C) However, Microsoft describes transitioning the device between the working state (visual on) and the sleep state (visual off) with figure 2. Microsoft

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describes that the sleep state is the default low power state and in the sleep state the processor is not executing code and no work is being accomplished for the user in the second paragraph of the Overview of the OnNow Architecture section. In addition, Microsoft describes that an OnNow PC appears to be either on or off to a user and that the OnNow PC enters the sleep state (visual off) when the user pushes the front panel button to indicate that the current work session is over in the first two paragraphs of the Overview of OnNow Power States and Power Policy section. Microsoft clearly recites the goal of giving the user the appearance that the PC is off when it is actually in the sleep state. It would have been obvious to one having ordinary skill in the art at the time the invention was made to turn off audible and visual indicators in the visual off (sleep) state in order to provide the appearance to the user that the OnNow PC is off as described by Microsoft and to save power in the visual off state. In addition, turning audible and visual indicators off as claimed would intensify the perception that the device is in an off state.

Per claim 17:

A) Microsoft teaches the following claimed items:

1. a data processing device configured to recognize a visual on state (on/working) and a visual off state (sleep) with figure 1 and with the operating system determining and controlling the power states in the Overview of the OnNow Architecture section;

2. a human interface device (HID) coupled to the data processing device with the display device in figure 1, with the user interface and at the first paragraph of page 3;

3. a module capable of intercepting a request to turn off the data processing system (the user pushing the front panel button) and instead transitioning the data processing device to the visual off state (sleep) with the operating system module tracking/intercepting the user's activities including front panel button pushes and transitioning the data processing device to the sleep state instead of the soft off state, with figure 2, in the Overview of OnNow Power States and Power Policy section and in the WM_POWERBROADCAST section on page 4.

B) The claims differ from Microsoft in that Microsoft fails to explicitly teach turning audible and visual indicators off in the visual off state as claimed.

C) However, Microsoft describes transitioning the device between the working state (visual on) and the sleep state (visual off) with figure 2. Microsoft describes that the sleep state is the default low power state and in the sleep state the processor is not executing code and no work is being accomplished for the user in the second paragraph of the Overview of the OnNow Architecture section. In addition, Microsoft describes that an OnNow PC appears to be either on or off to a user and that the OnNow PC enters the sleep state (visual off) when the user pushes the front panel button to indicate that the current work session is over in the first two paragraphs of the Overview of OnNow Power States and Power Policy section. Microsoft clearly recites the goal of giving the user the

appearance that the PC is off when it is actually in the sleep state. It would have been obvious to one having ordinary skill in the art at the time the invention was made to turn off audible and visual indicators in the visual off (sleep) state in order to provide the appearance to the user that the OnNow PC is off as described by Microsoft and to save power in the visual off state. In addition, turning audible and visual indicators off as claimed would intensify the perception that the device is in an off state.

Per claims 6-8, 18, 21, 23-25 and 37-39:

Microsoft describes generating a request to turn off the device by pressing a button on the device, automatically generating the request based on coupled devices and inactivity with the last paragraph on page 2 and with the WM_POWERBROADCAST section on page 4. Microsoft describes identifying a request to turn on the data processing device and transitioning to the visual on state with the wake-up request, with figure 2 and with the Overview of OnNow Power States and Power Policy section.

Per claims 3-5, 9-16, 20, 22, 26-31, 34-36 and 40-47:

Microsoft teaches the claimed items as described above. The claims differ from Microsoft, OnNow Power Management in that Microsoft, OnNow Power Management fails to explicitly teach the elements recited in Claims 3-5, 9-16, 20, 22, 26-31, 34-36 and 40-47. Regarding claims 5, 22 and 36, Microsoft does not explicitly describe turning audible and visual indicators on and off as claimed. However, Microsoft describes transitioning the device between the sleep state

(visual off) and the working state (visual on) with figure 2. Microsoft describes that the sleep state is the default low power state and in the sleep state, the processor is not executing code and no work is being accomplished for the user. It would have been obvious to one having ordinary skill in the art at the time the invention was made to turn off audible and visual indicators in the visual off (sleep) state and turn on audible and visual indicators in the visual on (working) state in order to save power in the visual off state and perform audible and visual work in the visual on state. In addition, turning audible and visual indicators on and off as claimed would intensify the perception that the device is in an on or off state. Regarding claims 4 and 35, Microsoft describes identifying a request to turn on the data processing device and transitioning to the visual on state with the wake-up request, with figure 2 and with the Overview of OnNow Power States and Power Policy section. Regarding claims 3, 20 and 34, Microsoft describes that the operating system is in control of power state transitions. Microsoft further describes providing API extensions that provide for communication between the operating system and applications. Microsoft also describes interfacing the OnNow system with the ACPI specification. It would have been obvious to one having ordinary skill in the art at the time the invention was made to intercept a turn off request prior to receipt by the operating system in order to route requests such as legacy requests to the BIOS to the operating system. Microsoft describes a human interface device coupled to the data processing device with the display device in figure 1, with the user interface and

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at the first paragraph of page 3. Microsoft describes that the visual off state is the low power sleep state that turns off the processor at page 2 in the Overview of OnNow Power States and Power Policy section. Regarding claims 12-16, 28-31 and 43-47, Microsoft describes that the OnNow system achieves a vision of the always-on PC that can quickly resume processing. Microsoft describes auto-saving files and device states when the system is going to sleep. It would have been obvious to one having ordinary skill in the art at the time the invention was made to intercept messages from the operating system to a graphics or audio controller and store the messages to memory in order to resume processing quickly with the audio and graphics controllers in the proper state to resume processing.

8. Applicant's arguments filed on June 1, 2006 have been fully considered but they are not persuasive.

In the Remarks, applicant has argued in substance that:

A. The examiner has failed to establish a prima facie case and has merely provided bare allegations that the reference anticipates the claims. The examiner makes general references to the Overview section and jumps to the conclusion that this section anticipates the claims. The examiner has completely failed to identify the factual basis for its rejection as required by the Federal Circuit.

B. There is no description in the Microsoft reference of the visual off state as claimed. The visual off state tricks the user into believing that the device is off by

turning all audio and visual indicators and any attached HIDs. Microsoft describes a low-power sleep state that is not a visual off state.

9. As to point A, the examiner disagrees with applicant's contentions. The examiner has established a prima facie case by identifying the factual basis for the rejection. The above rejections and the previous rejections clearly point out the elements in Microsoft that correspond to the claimed elements. The Federal Circuit does not require the examiner to find the same words that are in the claims. The examiner is required to identify how a recited element is allegedly disclosed by the cited reference. The examiner clearly pointed to the operating system as the corresponding element that is configured to "recognize" a visual on state and a visual off state and pointed applicant to the figure and section that describes that the operating system: a) determines power and configuration information about each device in the system and how it is being used, b) controls the device power states and c) assumes the central role of coordinating power management activities at all levels and takes responsibility for defining the power state transitions for the system. The examiner further pointed out that the sleep state corresponds to the claimed visual off state and the working/on state corresponds to the claimed visual on state. Since the sleep and working states are power states and the operating system controls and is responsible for all power states, anyone of ordinary skill in the data processing art would clearly understand that the operating system must "recognize" the sleep (visual off) and working (visual on) states. The other elements of the claims have been identified in similar detail. The examiner is required to identify the elements in the applied reference corresponding to the claimed elements. The examiner

is not required to explain the applied reference to applicant. Applicant is assumed to have some technical knowledge in the field of the invention. Applicant may disagree that the elements identified by the examiner correspond to the claimed elements. However, the rules of practice require applicant to point out how the claim language differs from the prior art. Arguments that amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references do not comply with 37 CFR 1.111(b). Arguments that do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made do not comply with 37 CFR 1.111(c). The examiner has clearly established a prima facie case by identifying the elements in the applied reference corresponding to the claimed elements. Furthermore, such contentions are an indication of applicant's failure to acknowledge the teachings of the prior art rather than the examiners failure to establish a prima facie case.

As to point B, the examiner disagrees with applicant's contentions. The examiner has pointed to the sleep state in Microsoft as corresponding to the claimed visual off state. Applicant has amended claim 1 to include limitations of claim 2. Claims 17 and 32 have been similarly amended. The examiner previously rejected claim 2 under 35 U.S.C. 103 as obvious in view of the Microsoft reference. The examiner has maintained the obviousness rejection and acknowledges that Microsoft does not explicitly teach turning audible and visual indicators off in the visual off state as claimed. However, the examiner asserts that Microsoft's sleep state otherwise corresponds to

the claimed visual off state and renders the claims obvious. Applicant argues that the visual off state is different because it tricks the user into believing that the device is off. Microsoft describes defining three global states: working, sleep and off. Microsoft describes making the sleep state the default state the PC enters when the user pushes the front panel button instead of the off state. Microsoft further describes that an OnNow PC appears to the user to be either on or off. See the first two paragraphs of the Overview of OnNow Power States and Power Policy section and figure 2. Microsoft clearly describes giving the user the appearance that the PC is off when it is actually in the sleep state and capable of responding to wake-up events such as a modem or network communication. Therefore, the sleep state tricks the user into believing that the PC is off. As to applicant's assertion that the visual off state tricks the user into believing that the device is off by turning **all** audio and visual indicators and **any** attached HIDs, this limitation does not appear in the claims. The claims call for turning off audible and visual indicators on the data processing device and on at least one HID. As described in the above rejections, Microsoft describes that the sleep state is the default low power state and in the sleep state the processor is not executing code and no work is being accomplished for the user in the second paragraph of the Overview of the OnNow Architecture section. In addition, Microsoft describes that an OnNow PC appears to be either on or off to a user and that the OnNow PC enters the sleep state (visual off) when the user pushes the front panel button to indicate that the current work session is over in the first two paragraphs of the Overview of OnNow Power States and Power Policy section. Microsoft clearly recites the goal of giving the user the appearance that the PC

is off when it is actually in the sleep state. It would have been obvious to one having ordinary skill in the art at the time the invention was made to turn off audible and visual indicators in the visual off (sleep) state in order to provide the appearance to the user that the OnNow PC is off as described by Microsoft and to save power in the visual off state. In addition, turning audible and visual indicators off as claimed would intensify the perception that the device is in an off state. Furthermore, it would be obvious to turn off audible and visual indicators in the visual off (sleep) state because the processor is not executing code and no work is being accomplished for the user when in the sleep state. Therefore, no new audible and visual indicators are generated in the sleep state and it is not necessary to operate these indicators. As to applicant's assertion that Microsoft's low-power sleep state is not a visual off state, the examiner disagrees with this assertion. Applicant has pointed to the description of visual off in paragraph 13 of the specification as articulating the meaning of the claimed visual off. However, paragraph 13 merely describes that data processing devices **may be** configured to include the described visual off state. Paragraph 35 of the specification indicates that the embodiments described in the specification are merely exemplary and that modifications and changes may be made without departing from the broader spirit and scope set forth in the claims. Therefore, the claimed term visual off has not been defined in the specification and it is improper to read the description of paragraph 13 into the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988

F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claimed visual off state is obvious in view of the teachings and suggestions of Microsoft.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis M. Butler whose telephone number is 571-272-3663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Dennis M. Butler

Dennis M. Butler
Primary Examiner
Art Unit 2115